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for Teachers *of*
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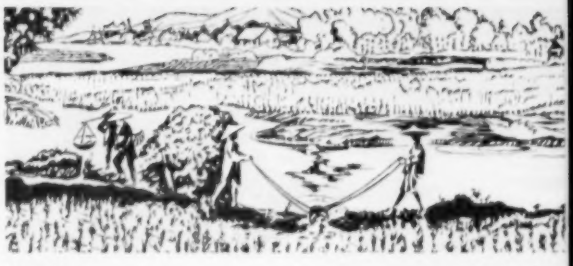

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CONTENTS FOR APRIL, 1955

Geography and International Understanding. By Sister Mary Ursula, R.S.M. 167

Sister Mary Ursula is currently geography instructor and Registrar at Mount Aloysius Junior College. She has had teaching and administrative experience at elementary, secondary and collegiate levels. The material in this article is drawn from a dissertation written in partial fulfillment of requirements for Master's Degree at Catholic University of America where she also served as a visiting lecturer.

Strip Coal Mining: A Problem in Conservation. By Lee Guernsey 174

Dr. Guernsey is Assistant Professor of Geography at the University of Louisville. He has also been an instructor at Indiana State Teachers College. This article is based upon field work in Western Indiana where Dr. Guernsey lived and taught.

North Carolina's Rich Crescent. By Coy T. Phillips 182

Dr. Phillips is a member of the Geography Department at the Woman's College of the University of North Carolina. Other college experience includes the University of North Carolina and Miami University, Ohio. Earlier in his career he served as a science teacher and principal in the Winston Salem City Schools.

Geography Behind the News: An Experiment in Educational Television. By Jewell Phelps 187

Dr. Phelps, Assistant Professor of George Peabody College for Teachers, recently started the second series of programs on Geography in the News over television station WSM-TV, Nashville, Tennessee.

Commercial Banking Geography in the College Curriculum. By J. Edwin Becht 193

Dr. Becht is Assistant Professor, Department of Geography, Indiana University, and recently was appointed Acting Assistant Editor of the JOURNAL OF GEOGRAPHY. This article is based both upon his experience in working in banks and upon extensive field work. One of his articles entitled "Turning Tows" appeared in the December, 1951 issue of the JOURNAL.

Geography in the Elementary and Secondary Curricula 203

An Electric Map Teaching Device. By Georgia Pesek 207

The National Council at Work. By M. Melvina Svec 209

Geographical Publications 164, 210, 212, 214

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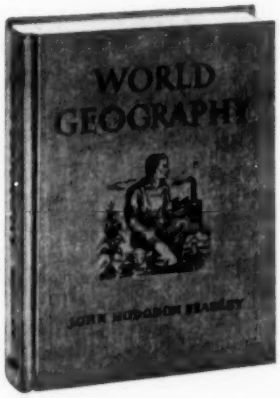

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GEOGRAPHICAL PUBLICATIONS

Ruby M. Harris. Middle America Series of four filmstrips entitled **Farmers of Mexico** (60 frames); **City People of Mexico** (60 frames); **Lands and Peoples in Central America** (60 frames); and **Island People of Middle America** (50 frames). Society for Visual Education, Chicago 14. Each strip $6.00 and complete set $19.00.

The Middle America colored filmstrip series is most suitable for elementary grades. A better selection and organization of frames would make them valuable to all grades.

Farmers of Mexico begins with an excellent sampling of scenes in Northern Mexico, illustrating the dry climate, sparse vegetation and types of agriculture. The filmstrip soon loses continuity and results in a kaleidoscopic presentation of irrigation, transportation and crops of Mexico. Selected frames from regional traverses (to be shown on maps) would establish better continuity and the variety of Mexican landscape.

City People of Mexico has better organization than the first filmstrip. From Northern to Central Mexico the functions of a dozen cities are shown with emphasis upon trade, tourism, crafts and transportation. The sequence of film on Vera Cruz is well done. Frames on Monterrey and southern urban areas are needed. Additional comments on the physical site of cities are desirable.

Lands and People in Central America includes well-organized sequences on banana, sugar and coffee plantations, local markets and the Panama Canal. The nature and problems of subsistence agriculture are not presented methodically and the strip skips from topic to topic without preparation.

No attempt is made to examine each Central American State. Probably this is a wise choice because of many similarities in geography throughout Central America. A half-dozen frames could be added to illustrate outstanding contrasts, such as population concentrations in Costa Rica and Nicaragua.

Additional maps are suggested, especially one which shows the locational relationships of the Panama Canal and the Americas.

Island Peoples of Middle America is a pause-and-go view of the Caribbean islands. The main features are colorful tourist pictures of the harbors and cities of Havana, San Juan, Bridgetown, St. George's, Willemstad, and Charlotte Amalie.

About one-third of the frames are devoted to agriculture, but these are too few to give an accurate summary of cropping and grazing.

The mineral resources of Trinidad and refining at Curacao and Aruba are emphasized, but mines of Cuba are not shown.

Maps in this series have very little use. Name plates superimposed on a Rand McNally relief map of the West Indies have obliterated most of the landform representation.

Major criticisms of the Middle America filmstrip series are poor continuity, partly the result of hazy objectives, and maps which fail to show clearly pertinent locations. Captions include questions so elementary that the filmstrips would not be well-received by students in the upper grades.

Any filmstrip can illustrate a wealth of geography if frames are carefully selected and arranged. It must not be a motley, loosely-hung collection of borrowed films.

A discussion outline should accompany each filmstrip series to aid teachers who may not be acquainted with the region.

JACK RANSOME

Indiana University

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GEOGRAPHY of the NORTHLANDS

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Throughout the book, the arctic is described as a place to be lived in, rather than as a strange place to be explored or visited. The physical features are treated primarily from the viewpoint of their relevance to human habitability, and the human adaptations of both aboriginals and immigrants are carefully analyzed.

Following the introduction which outlines the scope of the volume, the first half of the book, consisting of thirteen chapters, is devoted to systematic studies of such aspects as physiography, climate, biogeography, marine life, and population. Three chapters are devoted to the resources of the region and their economic development. The political and strategic aspects are examined in detail.

The second half of the work, with some fifteen chapters, deals with the regions of the arctic and subarctic starting with Alaska and dealing in turn with Canada, the Canadian Arctic Archipelago, Greenland, the northern islands, northern Scandinavia and the U.S.S.R. The six chapters devoted to the Russian Arctic are particularly noteworthy as one of the first reliable, contemporary accounts of a region of great strategic significance.

Geography of the Northlands is strikingly illustrated with maps, diagrams, and photographs. The maps, specially drawn for the work by J. P. Tremblay, *The Geographical Review* cartographer, constitute an atlas of the arctic. They cover, not only the physical features, but also such topics as climate, ice masses, and animal and vegetable distribution.

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VOLUME LIV APRIL 1955 NUMBER 4

GEOGRAPHY AND INTERNATIONAL UNDERSTANDING

SISTER MARY URSULA, R.S.M.
Mount Aloysius Junior College, Cresson, Pennsylvania

Three avenues led me to undertake the research that provides the basis for this discussion. My interest in international understanding dates back to my childhood days when I first heard the beatitude, "Blessed are the peacemakers for they shall be called the children of God." Later, I found that geography was one of the most poorly taught subjects in the curriculum. This led me to seek not only ways and means of improving my own teaching in this area, but also new channels for motivation. Finally, in the summer of 1950, at the international UNESCO seminar on the teaching of geography, at Ste. Anne de Bellevue in Canada, the representatives found themselves faced with the question, "What is being done about the teaching of geography in relation to international understanding?" Very little scientific data was available, and many of the delegates resolved to advance the cause of geographic education by pursuing this line of research. As one of the participants I found that the project seemed to crystallize my former thinking on the subject, and prepared to launch an experimental study in relation to it. After some investigation it was decided to carry on this survey at the secondary level.

EXPERIMENTAL AREA

For several reasons, Pennsylvania seemed a logical site for this experiment. Among these were the fact that Pennsylvania has the second largest number of Catholic high schools, being exceeded only by New York. These schools follow the general pattern of secondary education in the state, so that they offer similar courses of study. Then, too, the Pennsylvania state educators and geographers have been actively engaged in recent years in raising the status of geography at the secondary level.

The term international understanding is a little difficult to define. John F. Parr tells us that international understanding is "the comprehension and appreciation of other nations and peoples that results from the knowledge of these lands . . . as well as a similar knowledge of our own land," and Atwood describes it as "an intelligent sympathy for the people of other countries." This sympathy depends on "a knowledge of the living conditions in the various parts of the world, and on a kindly point of view." From these explanations it might be deduced that knowledge and a sympathetic attitude must be sought for in students in order to evaluate our teaching of geography in relation to international understanding.

A purely scientific discussion of this experiment would necessitate the use of much statistical information. In the interests of the reader, most of this data will be omitted, altho some of it is essential to an understanding of the returns.

Participating Schools

A preliminary survey of the teaching of geography in the Catholic high schools of Pennsylvania was made. Approximately 60 per cent of the contacted schools replied. Of this number about 28 per cent are now teaching geography. About three-fourths of the answering schools agreed to administer student questionnaires. The final choice of schools took into consideration the geographical distribution over the state, the classification of enrollment as boy, girl, or co-ed, and the classification of the school as private, parochial, or central. The cooperating schools were spread over the entire state; 1,064 questionnaires were returned by 37 schools.

The Questionnaire

The compilation of the questionnaire posed some difficulties. When one begins to speak in terms of attitudes, many factors must be considered: the home, the community, the school, the teacher—all contribute, often unconsciously, to student personality. It would be something of a feat to evaluate all the influences that play upon the character development of a single student, and virtually impossible to do this with a large group, none of whom one has contacted personally.

The final form of the questionnaire contained four parts. Part I,

which all students were asked to complete, tells us something about the student, his parents, his economic status, the nationality of his grandparents and the nature of the community in which he lives. Information from this section showed that the majority were seniors and lived in the city. It also revealed that the economic environment and ancestral heritage were quite varied, while the majority of the students had been enrolled in the same schools or school system for the greater part of their scholastic years.

Part II, restricted to students who had not studied geography, and Part III, restricted to those who had, will be discussed later.

Part IV has four sections: the first of these attempts to measure attitudes in an indirect manner, while the other three enter into the field of knowledge. Of the latter one dealt with interdependence, which is frequently stressed in relation to international understanding; another called for the identification of geographic personalities and the third included factual information concerning physical factors (location, topography, climate and resources) as well as cultural factors (people, work activities, religion, customs and standards of living). In the last two sections countries from every continent were included, while the last section stressed particularly countries that were then in the news.

STUDENT RESPONSE

This seems to be the point at which to mention again that both students who had studied geography in high school and those who had not, answered the fourth part on attitudes and knowledge. The purpose here was to afford some basis for comparison. Actually the students fell into three groups: students from high schools that do not teach geography, students who were enrolled in geography classes and from the same school others who were not. Correct answers were tabulated separately for each group, then the two groups that had not studied geography were combined, and finally all three totaled. The best known items were those that concerned our dependence upon other countries for coffee, pineapples and raw silk. The most frequently missed items refer to our partial dependence upon other countries for strategic metals, and a failure to recognize the importance of the Rhine to northwestern Europe. Actual computations showed that the students from schools that do not teach geography achieved a higher average score than the

other groups, altho students who have studied geography maintained a higher mean than the other group from the same schools. This may at first glance be discouraging, but other sources of information, among them interviews with teachers who administered the questionnaires, revealed in the first group a strong tendency to choose the better students, who might be expected to glean such information from their current reading. Statistics from the first survey showed that the poorer students predominate in the classes that we were able to contact.

Student Attitudes

More important, however, than achievement in content matter is the question of correlation between knowledge and attitudes. Section A of Part IV listed in one column 20 countries, and in another 22 descriptive words, which follow here:

Competitors	Energetic
Allies	Lazy
Trustworthy	Saving
Not to be trusted	Wasteful
Skilled technicians	Cruel
Unskilled workers	Well-educated
Very warlike	Illiterate
Very friendly	Ambitious
Very poor	Low standard of living
Very backward	High standard of living
Very progressive	Cooperative

With these descriptive words and the list of countries were the following instructions:

> Column I lists nouns and adjectives that may be applied to people. Column II lists people of various nations from every continent. What ideas have you about these people? Choose one, two, or *at the most three* descriptive words that agree with your ideas, and place the numbers preceding these in the lines following the second column in the order in which they occur to you. *Some numbers may be used several times; others you may not wish to use at all.* If you have no definite ideas about any of these, just leave the corresponding line vacant.

These directions were intended to emphasize three points: the student was being asked to classify people, not governments; he could limit his number of choices, or he could refrain from choosing at all. We had in mind here that in many instances it is impossible to classify an entire people by any qualifying word, and then again certain descriptive words may be plausible, while others are

not. Since the students' answers could take so many forms, actual measurement of results was even more difficult, but these attempts were made.

From a sampling of 50 students whose grandparents were native Americans, and 50 whose grandparents were foreign-born, it was found that there was little difference in the plausibility of the answers given for first or third generation Americans. The same sampling, which was also sub-divided as to boys and girls, showed very little difference in the plausibility of the answers of these groups.

In the next analysis, since three choices were permitted, the students' responses were weighted so that a first choice rated three, a second choice two and a third choice one. These weighted scores were transferred to individual cards for each country. Three sets of cards were used, one for each group of students. In the final count, it was found that very little difference existed in the attitude of the three groups. This, however, took into account neither the number of choices nor the plausibility of these.

To consider these latter factors, only the papers of seniors were handled. An even number of questionnaires belonging to students who had studied geography and to those who had not was selected from the total number in the following manner. For each paper with a score of 16 in one group, a paper with the same score was selected from the other; for each paper with a score of 12, another with a similar score was utilized. This meant that the total achievement score on one set of papers matched the total score on the other.

Handling each group separately, the actual number of choices of descriptive words was counted, and then divided into plausible and non-plausible choices. The plausibility of these descriptive words was, of course, an arbitrary decision. Here again it was found that the percentage of plausible answers for both groups was a little less than 50 per cent. However, in the number of choices, a noticeable difference was perceived. Those who had not studied geography made on an average of six more choices per student than those who had.

Finally, using again plausibility as a measuring stick, weighted values for reactions were matched against performance on the achievement sections. Here there was an indication that knowledge may influence attitudes. Proportionally, the attitudes of those with

higher scores was better than those with lower, altho by a very small margin.

Student Interest

As you may have noticed, no reference has yet been made to returns from Parts II and III. Since the measuring of attitudes by indirect methods frequently fails to produce the desired results, and since we make no pretense to this questionnaire's being an infallible measuring stick for international understanding, specific questions were included whose answers would give the students' personal estimates of their increase in knowledge, understanding of, and sympathy for the problems of other peoples as a result of their study of geography. Ninety-four per cent of the students agreed that the study of geography had helped them to know about people in other lands. Approximately 92 per cent felt that the study of geography in high school had helped them to understand the people of other lands and to be sympathetic with their problems. Besides this, about 67 per cent stated that no other subject had contributed more than geography to their international understanding. For those who felt that other subjects had contributed more, history, religion and Spanish were their choices.

Finally, we come to Part II, which elicited some of the most enlightening information on the entire questionnaire. About two-thirds of the students who had not studied geography indicated that they would have liked to do so. Further comparisons revealed that the percentage for seniors was even higher, 70 per cent. Using achievement as a basis, 75 per cent of the upper half indicated such a desire. What significance have these figures? All thru the ages educators have believed with St. Augustine that "free curiosity is of more value in learning than harsh discipline." If this be true, then we are offering geography to the students who to some extent neither desire it nor appreciate its possibilities, while we withhold it from those who could gain most from its study.

In Question 2 of this section, the students were asked to check reasons for desiring to study geography. These are listed here in the order of the students' choices:

1. I feel the need of knowing more about the world in which I live.
2. I am more interested in my world neighbors now than when I was in grade school.
3. A geography course would be good background material for other courses in high school and college.

4. I think that I could understand the study of geography better in high school.
5. I liked geography in grade school.
6. The map reading skills and type of reasoning developed in the study of geography appeal to me.

At least two significant factors seem to appear in these choices: the first, second and fourth choices indicate an increased interest in the world and world neighbors, as well as a developing maturity of thought. The relatively low percentage that indicated liking geography in grade school seems to me to be a challenge to geography teachers at the elementary level.

STUDENT CONTRIBUTIONS

In addition to the listed reasons, students were given an opportunity to express themselves on this question. It will be possible to include here only a few of those that seem most pertinent to the topic under discussion. Two of these might indicate that elementary geography does not satisfy the students:

1. You would be able to grasp more geography in high school than in the lower grades.
2. I have forgotten much about the geography I learned in grade school.

Two others might well support the idea of a life-adjustment program:

1. Geography is needed in my career. (Girl)
2. Because I will soon be in the army and geography would help.

Finally, these contributions indicate that students recognize the "*fact* of the society of nations" which is "as natural as the family . . . as natural as the states."

1. World problems can more easily be understood if one knows the conditions and occupations of the countries in question.
2. The way the world is now one has to know geography in order to grasp the world situation.
3. America is somewhat self-centered. We know plenty about our own country, but not nearly enough about other countries. It's about time we make a change in this respect.

CONCLUSIONS

In summary, permit me to say that neither the handling of the data nor the conclusions are complete. What we have found thus far seems to justify these statements:

1. Student responses indicate a need for more and better geography.

2. The status of geography at the secondary level needs to be improved. The percentage of those indicating a desire to study geography is higher in schools where geography is not taught. From personal experience I know that geography is often labeled as a subject to be offered to students who cannot pass in other supposedly more difficult ones.
3. Within the same school system, students who are studying geography show a moderate superiority over those who do not, in their handling of geography content.
4. Proportionally, the attitudes of students who study geography seem to be better than those who do not. These students are less inclined to label entire nations with definite descriptive words.
5. Direct student response indicates that the study of geography does contribute to international understanding.

STRIP COAL MINING: A PROBLEM IN CONSERVATION

LEE GUERNSEY
University of Louisville

The recent rapid growth of strip coal mining in the United States has caused many people to become concerned about the declining agricultural production of strip mining areas (Fig. 1). This

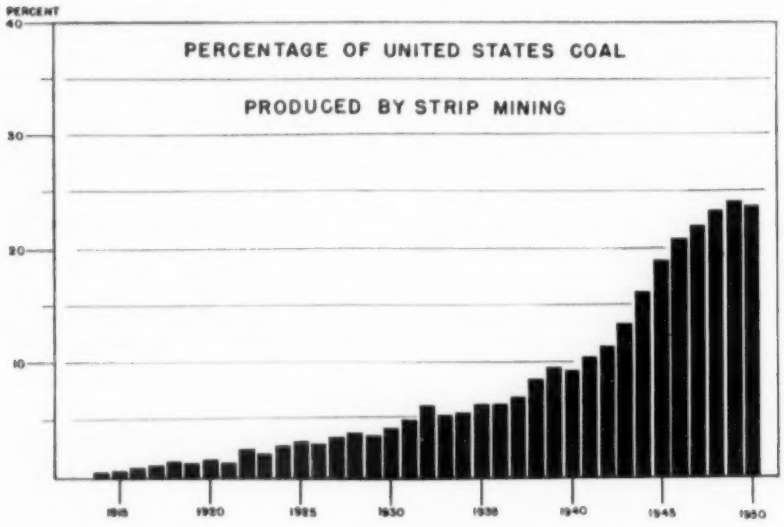

Fig. 1.

is particularly true in Indiana, where in recent years, a higher percentage of coal has been mined by strip mining than in any other major coal-producing state (Fig. 2). Strip mining has left about 60,000 acres of Indiana's land in spoil banks. Most of this area was in agricultural tillage and practically all was formerly farmland. As a result, tillable land and crop production have been reduced by strip mining.

Strip coal mining, on the other hand, has been important in conserving coal. Most shallow coal seams that have been strip

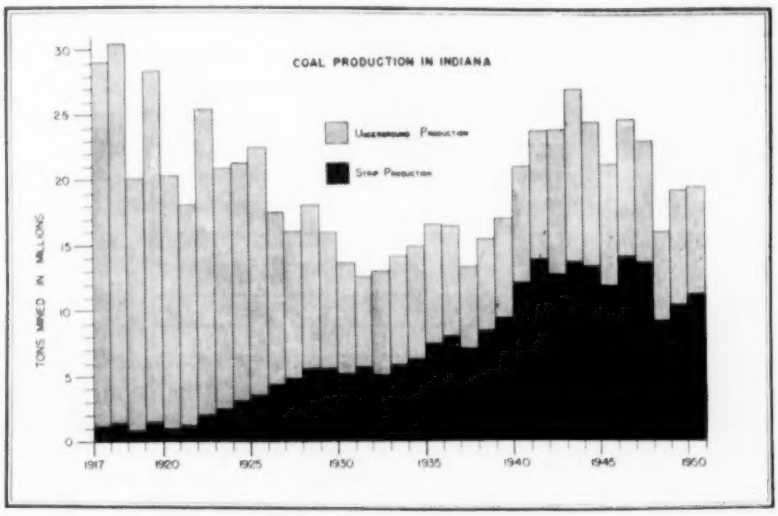

FIG. 2.

mined could not have been mined by underground mining methods because the overlying strata are too soft and porous to be supported by timbers and pillars. Shallow coal seams can be mined more cheaply by strip mining than deeper coal seams by shaft mining because there are less labor costs, less coal wasted in the mining process, and strip mines do not require such costly items as timbering, underground trackage, or ventilation equipment. However, strip mining overturns the land, and so the problem becomes one of stripping the land to mine the coal, or leaving the coal in order to till the land. In order to analyze this problem more

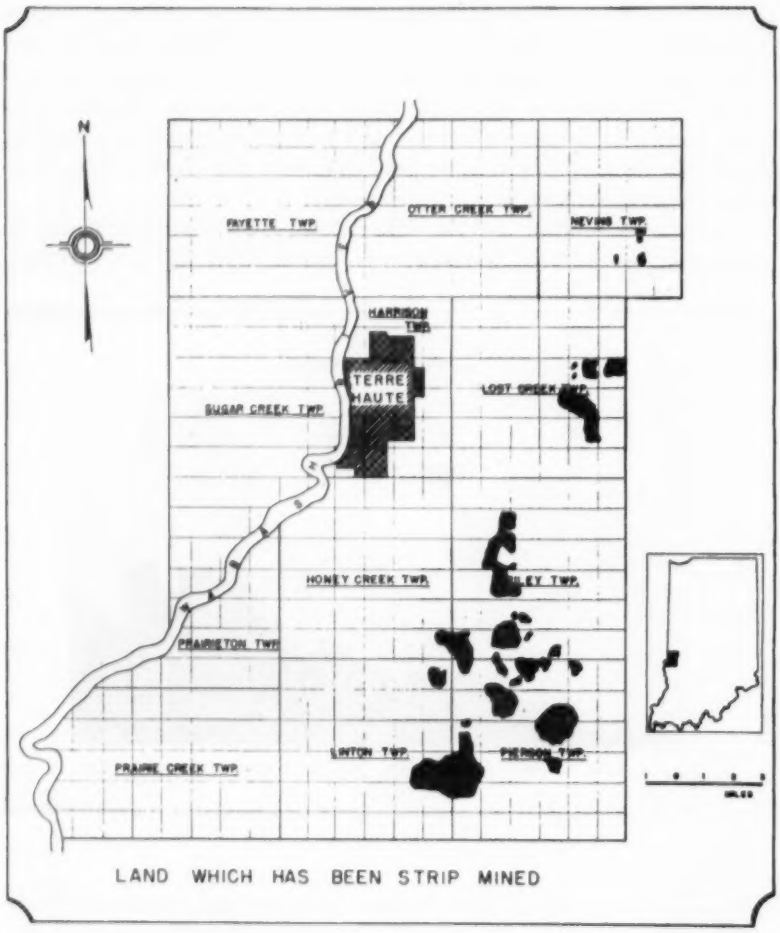

Fig. 3.

quantitatively, the author chose to study the impact of strip coal mining on the agriculture of Vigo County, Indiana.

Vigo County is located near the northern edge of Indiana's strip-mining area. It is a more productive agricultural county than most in Indiana where strip mining has occurred. Undoubtedly the impact is greater than for most counties of Indiana, but probably similar to that of other areas in the Midwest.

LAND USE CHANGES RESULTING FROM STRIP MINING

Strip coal mining affects land use because conventional uses of the land are terminated and uses of adjacent land are affected. In Vigo County, 4,274 acres of land have been strip mined for coal and 845 additional acres have been covered with spoil (Fig. 3). Most stripped land is now used for forestry. Since strip coal mining began on a large scale, crop acreage has declined 13.2 per cent in the three townships of Vigo County where strip mining has been most heavily concentrated. At the same time, land in pasture, timber and wasteland has increased 13.4 per cent.[1] A statistical comparison of the land use trends in the three townships in the uplands in which little or no strip mining has occurred with the three upland townships in which strip mining has been concentrated brings out the following significant facts:

1. That the number of farms decreased 19 per cent in townships in which strip mining occurred on a large scale while they decreased only two per cent in the other upland townships.

2. That the acreage in farms decreased 18 per cent in townships where strip mining has been concentrated as compared to an increase of 10 per cent in upland townships which had little or no strip mining.

3. That acreage in corn decreased 22 per cent in townships where strip mining has been concentrated, whereas corn acreage remained the same in the other townships of the uplands.

4. That, altho all townships in the uplands had decreased wheat acreages, the total decline was 2,142 acres more in the three townships in which strip mining occurred on a large scale.

5. That soybean acreage increased thruout the upland townships, but the increase was 1,290 acres less for the townships in which widespread strip mining occurred.

LAND OWNERSHIP CHANGES RESULTING FROM STRIP MINING

Large-scale strip mining has given rise to a new group of land owners who are not dependent upon agriculture for their support. These new owners are coal mining companies. They acquire coal by two main methods: 1. the coal company may buy the land out-

[1] All statistics concerning land use were gathered by the writer from unpublished data from the Bureau of Census for Minor Civil Divisions and from unpublished data enumerated by the township assessors.

right, or 2. the land may be leased, with a royalty paid by the company as the coal is mined. Land acquisition has developed into a highly competitive business. Land purchases by mining companies have generally raised real estate values because coal companies will pay more than the agricultural value for land underlain by minable coal. The land is generally purchased for more than its agricultural value, and, in some cases, the owners sell land for as much as $200 an acre more than the land would bring as farm land. Coal companies have purchased 1,867 acres in Pierson Township, 1,205 acres in Riley Township and 470 acres in Lost Creek Township.

Since 1930 most coal companies have leased large areas intended for mining. In the acquisition of land for strip mining by lease, a royalty of from 5 to 15 cents per ton of coal is usually paid by the coal company. An owner who leases land to a coal company may get a high price for his land when it is stripped if the coal seam is thick and of high quality. However, if the coal seam is thin, of low quality, or too deep, the owner may get only a nominal sum. The bargaining advantage lies with the company which has the complete drilling records.

In addition to selling or leasing their land, some owners insist on a buy-back agreement in the contract of sales which allows them to buy back stripped land at a very low price. This arrangement is comparable to selling only the mineral rights to strip mining companies. With this agreement, the companies often level the land adjacent to the owner's house, and leave a lake nearby. Such stripped land can then be used by the owner for forests, pasture, or as nonagricultural land.

The acquisition of land by strip mining companies has no immediate effect on taxes. Until the land is stripped the tax valuation is generally based on its agricultural productivity. After the land is strip mined, it seldom becomes tax delinquent because: 1. the spoil banks are always revegetated, 2. only part of the land bought for strip mining will actually be strip mined, 3. often part of the coal cannot be strip mined, but is held to be mined later by other methods, 4. the possibilities for oil and gas production encourage coal companies to pay taxes and hold onto the land and 5. stripped land is held by coal companies for future real estate improvements such as building subdivisions or recreational areas.

More serious is the long-run effect of strip mining on the tax structure of the townships where strip mining has occurred. It is commonly feared by residents in the strip mining areas that if it were not for present prosperity, some strip mined land would become tax delinquent. Then, as more of the township is stripped, an increased property tax would have to be assumed by farmers in order to maintain roads, schools and other township facilities. Nevertheless, practically none of the land which has been strip mined has been or is now tax delinquent.

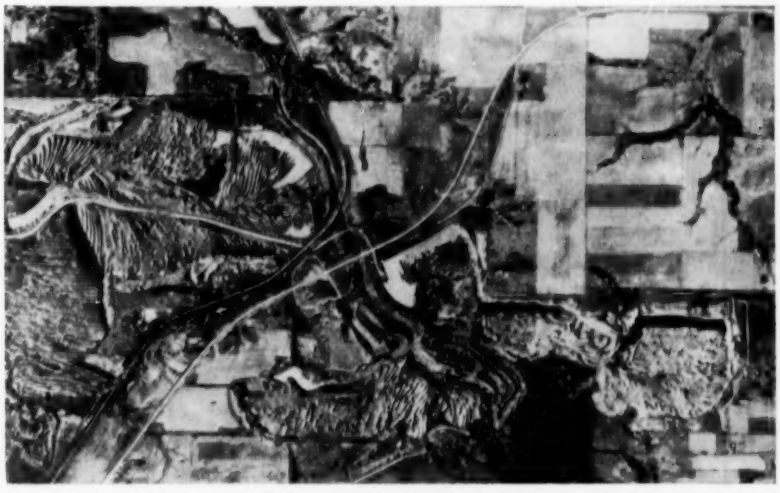

FIG. 4. Aerial view of a strip mined area two miles south of Riley, Indiana. Note the rectangular fields in the unstripped areas whereas fields adjacent to the spoil banks are irregular in shape and size. The orderly arrangement of roads in the areas where no strip mining has taken place also stands in marked contrast to the random arrangement within the areas of strip mining. (Photo by the United States Department of Agriculture)

IMPACT OF STRIP MINING ON FARMSTEADS

Strip mining affects not only land use and land ownership, but also the character and pattern of rural settlements. However, strip mining seldom destroys a farm so completely as to make farm settlements impossible. Rather, an increasing number of persons who live on the strip-mined farms obtain their livelihood from non-agricultural occupations. In addition, strip mining creates instability because farmers who lease or sell their land for stripping

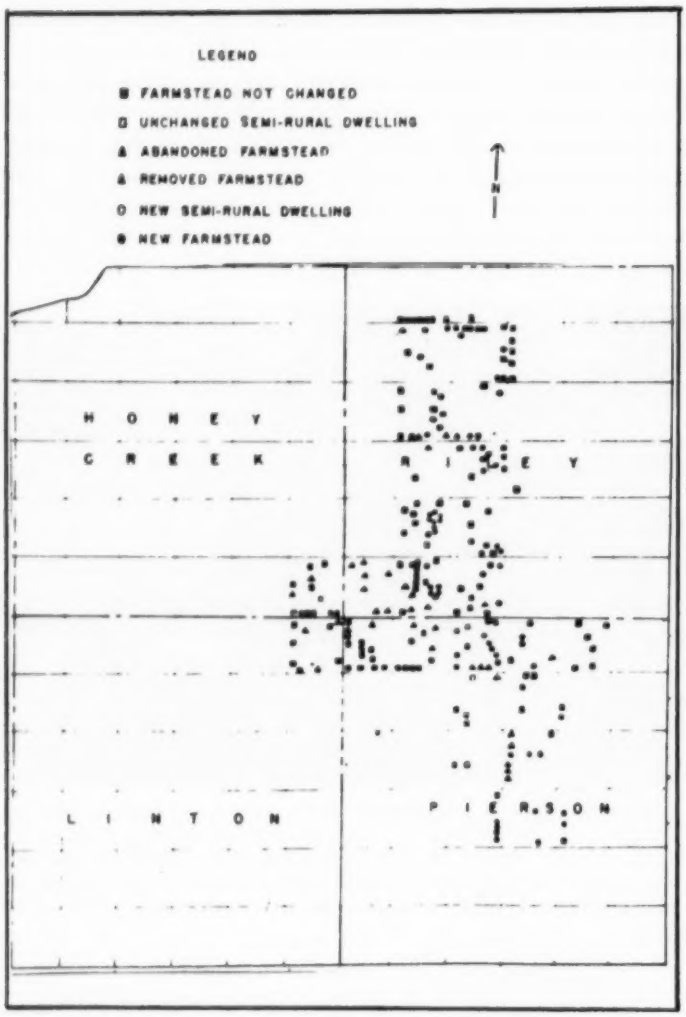

Fig. 5.

often move to new locations. They are commonly replaced by persons who have more interest in mining and industry than in agriculture.

Strip mining creates a "crazy quilt" pattern of fields. Most of the fields in the sections in which strip mining has occurred are

irregular in size and shape (Fig. 4). The demand for agricultural land is such that all available land suitable for cultivation is cropped, and normally spoil banks form the field boundaries. The fields generally average about 10 or 15 acres, with the fields being as large as strip mined spoil will permit.

The number of farmsteads generally reflects the amount of strip mining that has occurred within each section. Stripping reduces the number of farmsteads; consequently, the more strip mining that occurs within a section, the fewer farmsteads remain. Of the farmsteads within all the sections of Vigo County in which strip mining has occurred, only two per cent have been constructed since the land was strip mined, 69 per cent have remained unchanged and 29 per cent have been torn down or abandoned (Fig. 5).

Future Effects

The total area that will be strip mined in the future is difficult to estimate for three reasons: 1. lack of data on shallow coal reserves; 2. changing social and economic conditions and 3. possible technological developments. If machinery continues to be made larger and more efficient, strip mining may affect more land than now seems possible, and possibly the extent of strip mining will have to be controlled.

Altho conservation problems caused by strip mining thruout the United States are too varied for conclusions from this study, other areas probably exhibit effects similar to those in Vigo County, Indiana. Consequently, geographic studies should be conducted to determine the best uses for the many thousands of acres of farmland which have been strip mined in the United States in recent years. By selling the coal and then wisely turning spoil banks into forests, pastures, home sites, recreational areas and game preserves, most areas will probably return incomes greater than that from agriculture tillage alone.

Two 1955 NCGT Committees

Nominations Committee: Clyde F. Kohn (Chairman), Department of Geography, Northwestern University, Evanston, Illinois; John C. Finney, Helen Mixter and John W. Morris.

Resolutions Committee: Elizabeth Eiselen (Chairman), Wellesley College, Wellesley 28, Massachusetts; J. Wesley Coulter, Lyle R. Fletcher and Villa B. Smith.

Members are invited to write to the chairman of each with suggestions and ideas that will advance the best work of the leadership in NCGT.

NORTH CAROLINA'S RICH CRESCENT

COY T. PHILLIPS
Woman's College of the University of North Carolina, Greensboro

In the Piedmont Region of North Carolina is a highly productive, crescent shaped area, herein called the "Rich Crescent," (Fig. 1). This area is conspicuous for its urban development not only in the state but in the entire Southeast. It plays a dominant role in the economic life of North Carolina, constituting the state's chief industrial belt and commercial focus.

Over a million people (a fourth of the total) live in 10 counties

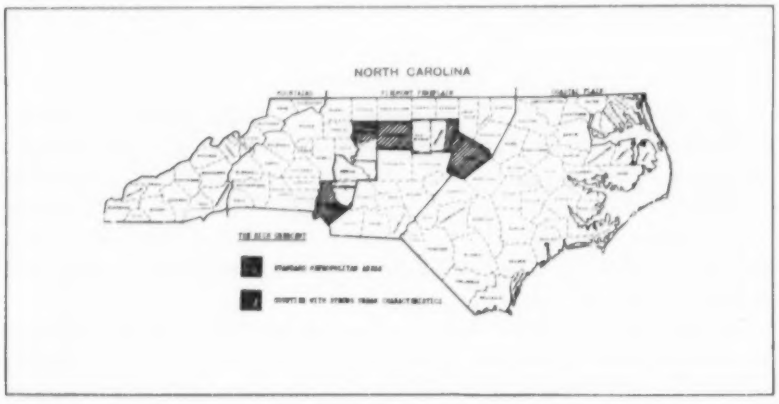

Fig. 1. The Rich Crescent, consisting of ten counties, contains about 25 per cent of the people and nearly 40 per cent of the cities including, with one exception, all those of over 50,000 people.

on nine per cent of the land in the state. That the Crescent area is readily the most urbanized in the state may be seen on the map in Figure 2. Indeed only 12.5 per cent of people in the Crescent counties were classed as farm rural in 1950. Of the state's 31 cities of 10,000 or more, 12 are located in the Crescent. These 12 cities contain 43 per cent of all the urban population of North Carolina.

What were the geographic, economic and political conditions which gave rise to this pattern of development? Did the pattern appear early in the history of the region? If so why and if not what caused it to take form?

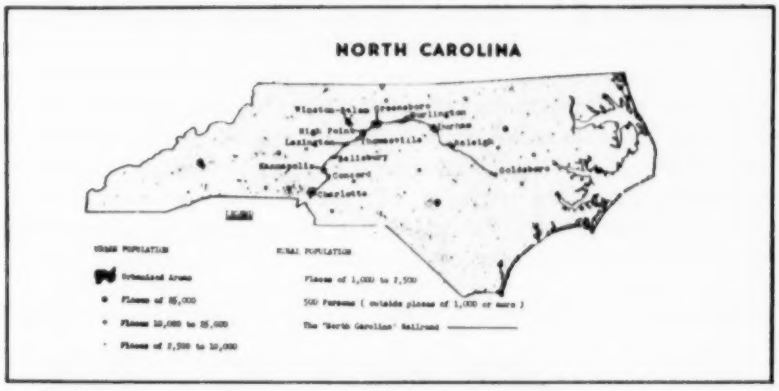

Fig. 2. The region's million people are scattered over a narrow belt from Raleigh to Charlotte, a distance of 175 miles.

Geographic Setting and Historical Background

A century ago, when rail transportation was about to penetrate the Piedmont, there was little to foretell the importance of the Crescent area. It contained not a single city nor hardly an urban place except Raleigh, the capital. Some of the larger present-day cities did not then exist even as villages. Only two towns, Charlotte and Salisbury, in addition to Raleigh, had more than 1,000 people in 1850 and they each had barely a thousand. The entire Piedmont region was isolated, being severely handicapped by a lack of transportation.

Early in the 1850's a single railroad, built by the state, ended isolation in the Piedmont and gave orientation to much of the subsequent development of the region. The railroad known as the North Carolina Railroad was designed to be an east-west line linking the Piedmont with the North Carolina coast.

The charter of the North Carolina Railroad provided that it connect with a line at Goldsboro (Fig. 2) on the Coastal Plain and extend westward thru the capital of the state to Charlotte. As built the road followed a circuitous route across the state. A shorter route by about 20 miles could have been found from Raleigh to Charlotte by way of Pittsboro and Asheboro, the county seats respectively of Chatham and Randolph counties. The more lengthy route accomplished two things (Fig. 3). In the first place, it avoided

rough terrain in the form of low monadnocks in Randolph and neighboring counties. In the second place, it avoided heavy grades either by following the divides or by crossing tributary streams at points where grading was of relatively small consequence. There may have been political considerations as well, but it is evident that relief was a strong determinant in a day when hand methods of grading prevailed.

The North Carolina Railroad (Fig. 2) was soon to be connected at Greensboro with a Virginia line and later to become a part of

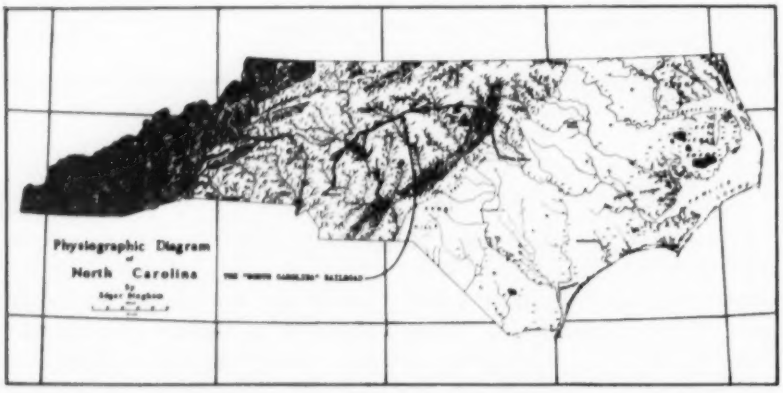

Fig. 3. The circuitous route of The North Carolina Railroad avoided heavy grades either by following the divides between drainage basins or by crossing tributary streams at points where grading was of relatively small consequence.

the Southern Railway System. Thus, with north-south connections added to the east-west alignment, the Crescent shaped area, located in the center of the Piedmont as well as the center of the state, was in a strategic position. So located it was destined to attain prominence as the state and region developed industrially. No better location could have been found with respect to the raw materials from which the state's industrial system was to rise.

The railroad roughly paralleled the northern edge of the Cotton Belt, touched the Old Bright Tobacco Belt in the Piedmont of North Carolina and Virginia, and penetrated the Coastal Plain where the new Bright Tobacco Belt was later to develop. Moreover, it bisected the hardwood forest of the Piedmont region. Thus, the towns that grew up along the railroad were in a favorable position

to play a pioneering role in the development of the state's three major industries: cigarette manufacturing, cotton textiles and wood furniture.

The isolation of the Piedmont was hardly ended before the Civil War began. The War and the difficult years that followed retarded industrialization. Yet it was a period of preparation for things to come. Strong factors, some positive, others negative, were at work motivating industrialization. On the positive side were many of the ingredients essential to industry—raw materials in the fields and forests, water power in the streams, surplus labor in the countryside, rail transportation newly arrived in a retarded region and a rising demand for textile and tobacco products in the North.

Also important, but less easy to identify, were the negative factors, factors associated with an outmoded way of life and the aftermath of war. The region was poverty stricken by civil strife and the land impoverished by generations of misuse. Employment was almost non-existent except on farms at subsistence wages. The urgent need for raising economic standards had much to do with bestirring the people to improve their lot. In other words, the rise of industry was a "home-grown affair" not something superimposed from without. It was not easy to achieve. Capitol was hard to come by, at least in the beginning.

The Growth of Industry

North Carolina's trio of industries: tobacco, textiles and furniture gave the Crescent belt its initial start. In each industry there was a strong tendency for factories to concentrate in centers along or near the original North Carolina Railroad. It is significant that this relatively small area is responsible for more than half of the "value added by manufacturing" and employs about 45 per cent of the state's industrial workers.

The tobacco industry, starting with smoking tobacco, was the first to revive after the Civil War. The machine-made cigarette introduced in the 1880's made the tobacco industry a mass production industry. Today the cigarette is dominant among tobacco products. Two Crescent cities, Winston-Salem[1] and Durham, are responsible for most of the production in North Carolina and to-

[1] Winston-Salem is the only one of the Crescent cities not located on The North Carolina Railroad.

gether they manufacture about half of all the cigarettes made in this country.

The cotton textile industry, the largest employer of labor and the greatest producer of wealth in the state, has done more than any other industry to shape the pattern of urban development in the Crescent and elsewhere. The dispersal of Crescent towns at intervals of 10 to 20 miles was mainly in response to the textile industry. Each cotton mill recruited labor from the countryside. Care was taken to space the mills (horse and buggy days) so as to avoid competition for labor, thus accounting for the number of moderate sized towns and cities in the area.

Furniture manufacturing is North Carolina's third largest industry. Tho not restricted to the Rich Crescent, furniture manufacturing is carried on in several cities in the area; one of them, High Point, being the most important furniture center in the Southeast.

Commercial Activities

As industrialization advanced, wealth accumulated and trade, both retail and wholesale, developed. Each town became a trade center which expanded as buying power rose. Today, the prosperity of the Crescent area, as measured by the volume of retail sales, compares quite favorably with that of the country as a whole. The per capita volume is only five per cent below the national average. This average, incidentally, is well above that of the state and region. About 37 per cent of the volume of retail sales in North Carolina is concentrated in Crescent towns and cities.

Wholesale trade is even more concentrated. Sixty per cent of all wholesale trade in the state originates in Crescent centers. Of this 60 per cent, 95 per cent emanates from the five metropolitan counties, half of it in one city, Charlotte.

What of the Future?

The prospects for continued leadership for the Rich Crescent appear to be good. There is little evidence that the area has become so crowded as to retard industrial expansion. The region's (Fig. 2) million people are scattered over a narrow belt for a distance of 175 miles. Everywhere open countryside exists within a few miles of the center of town. Of the 12 cities in the region, only five exceed 50,000 in size, while an equal number have populations under

25,000. Recent population growth belies any downward trend. From 1940 to 1950 the area gained 22 per cent as against 13.7 per cent in the state and 14.5 per cent in the nation.

We should not overlook the fact that some types of industries come to a region only after the region has passed from youth to maturity. The Crescent is just beginning to face industrial maturity. With maturity greater diversification is expected, indeed has already begun. The pattern of urban development in North Carolina appears to be well established. The apparent advantages of an early start for the Crescent will likely continue.

GEOGRAPHY BEHIND THE NEWS: AN EXPERIMENT IN EDUCATIONAL TELEVISION

JEWELL PHELPS
George Peabody College for Teachers

Teachers of geography often feel concern over the small geography offerings in our schools and colleges and over the lack of geographic understanding by the public. Sometimes we voice our concern by asking, "What has happened to geography?" or "Why does the public know so little about it?" If we agree that there is a need for more geography in the schools and that the public needs to know more about it, then we as teachers will want to make use of all proper means of rekindling an interest in our subject. One means that must not be overlooked is the new and powerful medium of television.

This paper describes a television program that represents an effort to carry geography to persons outside the classroom. This effort, or experiment, is being carried on with a minimum of financial support and by persons who have full-time teaching employment.

The 30-minute program is entitled "Geography Behind the News" and is produced and presented by faculty and students of George Peabody College for Teachers once each month over a commercial television station, WSM-TV, Nashville, Tennessee. The station provides time and a program director without charge to Peabody College.

This program was conceived by the Dean of Instruction at Peabody. The Department of Geography was invited to have a part in the program because the dean, who is not a geographer, believed that geography should have something worth while to offer a television audience. Each month the program focuses on some country that is currently in the news. The stated purpose of the program is to, ". . . reveal the physical, economic, political, and cultural factors that make up the geography behind the news." By concentrating upon the so-called "hot spots" of current military or political importance, the program seeks to capitalize upon the established interests of the public.

Production

The production of the program is in the hands of a small group that makes plans and gathers materials for the program. This production team is composed of faculty and students of Peabody College. It consists of the Dean of Instruction; instructors of business education, geography and history; a graduate student in art; and an undergraduate major in social science.

The production team holds two meetings in preparation for each program. At the first meeting, at least two weeks before the program date, the participants and the general content of the program are decided upon. Following this meeting, the art student begins preparation of visual materials and the social science student begins library research. The second meeting, held four days before the program, includes the program director who assists in making final plans.

Participants

The program has two regular members, a historian, and a geographer. The latter directs the preparation of the program and serves as its moderator. In addition, a guest member who is a native of the country under study is invited to participate whenever possible. Fortunately, a large number of students from other countries enroll for study in the university center of which Peabody College is a part. During the past year students from Pakistan, Malaya, Germany, Austria, Israel, Jordan and Guatemala appeared on the program. In general, the very appearance or speech of a foreign student will capture the attention of a television audience. Furthermore, an audience is likely to accept the word of the native

of a country as being authoritative. Visitors are also of great help in obtaining information and materials.

Format

At one of its earliest meetings the production team decided upon a general format for the geography programs. This format has been followed, with occasional modifications, thruout the year. The studio set includes a large background map of the world, a chalkboard, map stand, sofa and easy chairs. Appropriate slides and theme music open and close the show.

The program opens with the camera focused on a spinning globe. As the station announcer introduces the day's topic, the globe slowly comes to a stop with the country under study becoming clearly visible as a close-up on the television screen. The first part of the program consists of an overview of current happenings and conditions that warrant focusing attention on the particular country. For example, the news about the possibility of creating United States military bases in Pakistan was used to introduce the program dealing with that country.

Following the introduction, the geographer gives a résumé of the physical and human geography of the country. This is elementary geography, consisting mainly of description. Next, the historian presents an explanation of the history of the country in its geographic setting. Emphasis here is placed upon developments that contribute to an understanding of current conditions and problems.

The last part of the program is an informal discussion by the two regular members and the guest concerning the problems that confront the people of the country. The program usually closes with a series of questions which has a two-fold purpose: 1. To dispel the notion that we have faced all the issues or have given solutions to all the problems facing the people of the country. 2. To create within the TV audience a continuing interest in the affairs and problems of the country under study.

Use of Visual Materials

Television offers an opportunity to use many types of visual aids. The following have proved useful in the presentation of "Geography Behind the News":

Motion pictures. Short, "to-the-point" movies are useful on this

type of program. To the present, only films cleared for telecasting without cost have been used on the program. For example, the Egyptian Embassy in Washington furnished a film depicting one phase of economic development in Egypt. The information services of many foreign governments are good sources of visual and other materials.

Film clips. Film clips are short film sequences from the TV station film library that are inserted into live telecasts. Many commercial stations possess extensive film clip material used in newscasting. They may be used with or without the original sound track. Without sound, they may be inserted to illustrate any part of the program without interrupting the spoken commentary of the geographer.

Opaques. Opaque prints may be used by mounting them on devices called "flip cards." The flip cards are placed before the camera and the pictures are turned either by the participants or mechanically. Opaques for television use must have a non-glare surface. They should be as large as a sheet of standard typewriter paper, and should be of uniform size if they are to be shown one immediately following the other. Flip cards for showing opaques are standard equipment in television studios.

Maps and graphs. A large part of the illustrative material used on the program consists of maps and graphs drawn by the art student under the direction of the geographer. Their preparation presents special problems. One needs to keep in mind that the television picture is imperfect. A drawing never appears as clear on the TV screen as the original. One must remember, too, that the distance of the viewing audience from the map amounts to the sum of the distance between the map and the studio camera and the distance between the viewer and his television screen. Three general principles have proved useful in the preparation of maps and graphs for this program: 1. Maps and graphs must be simple. 2. Lines must be boldly drawn. 3. Lettering must be large and of an open simple style.

Evaluation

Two useful criteria for evaluating this experiment are 1. the reception given the program by the television audience and their comments and 2. the lessons learned in the studio.

The program has met with approval. Altho it has not received

great public acclaim, persons from many walks of life show interest in this series and appreciate the effort that is being made to produce it. Many teachers and students in the Nashville area have indicated that they have benefited from the program.

From the standpoint of the program members, one of the chief tangible benefits from the experiment lies in the lessons that have been learned. One important lesson is that a surprisingly large number of people can be interested in geography. It is probably true, as we geographers say, that the level of geographic literacy in this country is low. But I believe that it is equally true that many people are willing to learn more geography if it can be presented to them in an interesting manner. I believe, too, that many school administrators and operators of television stations are willing for geographers to have the opportunity to carry geography to the American public thru the medium of television.

Other lessons have been learned about the techniques of production. For example, the importance of clear and simple visual aids, whether they be maps, pictures or objects to handle, can hardly be emphasized too strongly. Also it has been determined that simple, idiomatic English is most effective with a television audience. Further, experience has shown that movement during the program is important. Thru practice, one develops the facility to watch the studio clock, the cameras, the monitor set, the studio manager and at the same time, think about the progress of the program. Finally, one has to adjust quickly and easily to unexpected developments. Many unscheduled events can take place on a program with amateur performers who have had little or no rehearsal in the studio. Incidentally, a useful general reference on techniques of television production is the book by Jennie Waugh Callahan, entitled *Television in School, College and Community*, McGraw-Hill, 1953.

Educational Television in the United States

Much ground-work has been done for the expansion of geography by means of television. In 1952, following a successful legal battle for educational television by a Joint Committee on Educational Television (made up of representatives of seven outstanding educational organizations), the Federal Communications Commission reserved 242 television channels for non-commercial, educational use. This is 12 per cent of all channels within the United

States. By way of contrast, the Radio Act of 1927 allocated no radio channels for education. Not until 1945 were 20 FM channels set aside for educational use.

Whether or not these 242 channels will be used for educational purposes will depend, however, upon the amount of support provided by a large number of lesser organizations and by individual citizens. Under FCC regulations, channels not claimed for educational use will be awarded to commercial telecasters. Encouraging progress has been made, however. Six educational TV stations are already in operation, with a probability that 20 will be in operation by the end of 1954. Many additional communities are striving to establish stations within the near future. In addition to full-time educational stations, many commercial stations are willing to contribute air time for educational programs. Surely, this offers the prospect for growth in the utilization of television facilities by educators in general and geographers in particular.

Conclusion

The program described represents one effort to utilize the medium of television to expand horizons of learning by carrying geography to persons outside the classroom. Some of you have done much more. This program indicates, however, that results can be achieved even with untrained personnel and little financial support.

The development of television may have come at an important, even a crucial, time in the growth of our public school system. Schools are overcrowded and teachers are in short supply. Even record appropriations have not met the need imposed by the rapidly expanding school population. In the face of this situation, many school administrators and teachers are considering changes in the structure of the school system and in methods of instruction. In many cases television is the trigger that is setting off this re-examination.

The expanding use of television presents a challenge and a bright prospect for geography. The American appetite for information is immense. As geographers, we know that the materials of geographic reality are fascinating and inexhaustible. If, thru the marvel of television, we can apply some devices of showmanship to this richness of reality, we may help to bring about a reawakening of widespread interest in geography.

COMMERCIAL BANKING GEOGRAPHY IN THE COLLEGE CURRICULUM

J. Edwin Becht
Indiana University

Introduction

That banking must be considered along with mining, agriculture, transportation and manufacturing in order to determine the economic character of an area is a major conclusion of this study. Mining and agriculture produce raw materials, transportation carries them to the manufacturers (and to the consumer), the manufacturer turns the raw materials into finished and usable products; and, under our free economy, banking provides money and credit and important other services, by which these processes are either enhanced or even made possible. To date, the place of banking in American Geography has been largely overlooked and the subject is not discussed in most Economic Geography textbooks currently in use.

Seemingly, the subject of banks and banking services has been dismissed by geographers as being either ubiquitous or capable of flowing to wherever a demand arises. However, the fact remains that the character of banking does differ from place to place and these differences vary in their effects on the economy of a community, city or region. These effects may be reflected in many ways —in the kind of housing that is available, in the degree of farm progressiveness (or the lack of it), in the efficiency of factories, in the amount of local mineral development, in the adequacy of service facilities, in the kinds of commerce within a city and in the ability of people within a given area to help themselves under adverse economic conditions. Especially do banking influences determine the economic stability, or the rate of economic development, and/or the degree of rehabilitation that is possible in a specific area.

Prosperous banks are for the most part located in regions of growing industries, increased services, new home construction or of thriving farms. Therefore, along with their public relations work individual bank promotional organizations do everything that they can to improve their service areas by assisting in the development and maintenance of industries, stores and necessary

services and to aid surrounding farmers in developing the richest possible farms consistent with the resource base of the area. It is chiefly in the measures that banks adopt to accomplish these objectives that they differ from place to place and consequently exert varying influences on the geography of their respective service areas.

Furthermore, in an attempt to assist local business, certain banks offer highly specialized, and often very expensive services that require unique machines, large staffs and highly trained technicians to operate them. These extremely specialized services have been developed primarily since World War II. Some of these banking aids are of such a nature as to influence many industries operating on a national scale to locate their central offices nearby.

Thus, today, bank promotional programs and their specialized services have made banking a factor that must be reckoned with in determining the economic geography of rural areas, and in determining the degree of success met with by urban planners. At the same time, a knowledge of geography by bankers is necessary in order to develop the most successful bank operations that are possible in a given area.

Unique Banking Practices That Influence the Geography of Rural Areas

The acquisition by farmers of producer's good against agreements to pay in the future involves risks not often met in other fields of credit. In farming, the success or failure of the enterprise depends more fully upon the ability of a single individual than in other kinds of business. Moreover, the total of a farm loan may be disproportionately large in comparison to the value of the equity in the enterprise. Finally, excessive rainfall, unseasonal frosts, windstorms, droughts—any of these may make it impossible for a farmer to pay an outstanding note when it comes due. Likewise, bumper crops may cause drops in market prices so that a farmer's income, even in a good year, may be inadequate to meet the demands of an outstanding loan. Because of these problems and risks farm credit has, in the past, nearly everywhere demanded high rates of interest, unreasonable short maturities, extremely high collateral and certain other restrictive clauses. Thus, bank requirements have resulted in the farmer viewing them with sus-

picion and, until very recently, in their turning to government assistance instead of to local banks.

To combat this widely prevailing attitude and to insure themselves of a better future some rural banks have adopted unique programs. For example, members of the Kentucky Bankers Association adopted a program to expand and to improve pastures in Kentucky. (In 1947, approximately 350 of Kentucky's 400 banks had resources of less than five million dollars and were largely dependent upon agriculture.)[1] Ralph Fontaine, as secretary, stated the goal for the association as follows:

"The whole problem is bigger than any individual, farmer or banker. . . . Very briefly, here it is—the center of the Wheat Belt lies to the west; and the center of the Cotton Belt lies to the South. We want to make our state the center of the Pasture Belt. Kentucky folks and Kentucky Bankers Association should take the lead in promoting this movement."[2]

The KBA hired a full-time agricultural specialist to promote the project. "Banker-Farmer Field Meetings" were organized and in the first year alone more than 18,000 farmers were contacted. Bank credit for farmers following farm plans as outlined by county agents became easier to obtain and played an important part in the change of not only the quantity but also the quality of pastureland.

Even the kinds and quality of livestock on Kentucky farms may be a reflection of commercial bank practices. Individual banks recognizing "the folly of good pasture for poor stock" began to purchase purebred animals and made them available to their customers seeking to improve their herds.[3] By 1952 over 100 Kentucky banks were participating directly in the program of stock improvement and some banks had hired their own agricultural agents.

Even tho Kentucky Bankers can claim only a part of the credit it cannot be denied that their proposed program of increasing interest in soil-conserving hay and pasture crops for livestock has met with initial success. In spite of severe drought conditions since 1947, the year that their program began, cattle numbers set a new high every year but one. The increasing relative importance of cattle as a factor in Kentucky farm income may be better under-

[1] Robert P. Steptoe, "Kentucky Bankers Cover State in Better Farms Drive," Burroughs Clearing House, January, 1952, 30.

[2] *Ibid.*

[3] *Ibid.*

stood by observing the percentage of the total receipts derived from the sale of cattle. From 1924 to 1935 cattle receipts from Kentucky farms increased from 8.5 per cent to 15 per cent. They remained at that level until 1947, when 19.6 per cent of receipts were from this source. From 1947 thru 1953 the percentage was either close to or slightly over 20 per cent.[4] In addition, the relative importance of dairy products and grass seed have increased sharply.[5]

Another way in which rural banks are changing the geography of some areas is found along the Louisiana Gulf Coast. There banks are expanding their service areas by organizing drainage districts in order to reclaim low, marshy coastal land. These banks promote and assist in the development of new farm land by providing necessary working capital and technical advice. Similarly, reclamation of wet lands in Cowlitz, Wahkiakum and Grays Harbor Counties in the State of Washington was to a high degree instigated by local banks. In these projects bankers participated thruout the planning stages and made loans to individuals to help put thru drainage ditches and, later, to develop the land according to recommendations made by the Soil Conservation Service.[6]

Elsewhere, banks are directly and indirectly influencing agriculture in other ways. The Bank of Asheville, Asheville, South Carolina, directly affected its surrounding rural area by establishing a program designed to add a good agricultural base to the tourist trade and industries which already existed.[7] A 1950 inventory of Buncombe County, of which Asheville is the county seat, showed that there were 4,266 farms averaging 9.3 acres. The inventory further showed that truck gardening and dairying offered the most stable types of farming for the area. The bank thru educational and promotional work, plus favorable bank credit, encouraged the installation of irrigation and sprinkling systems to intensify vegetable farming. To strengthen dairy farming the bank, among other things, purchased forms for the construction of silos

[4] Office of the Agricultural Statistician for Kentucky, U. S. Department of Agriculture, "Kentucky Agriculture Statistics 1945-1953." Also report "Livestock on Kentucky Farms January 1, 1954."

[5] U. S. Department of Agriculture, "Kentucky Farm Marketing Report for December, 1953."

[6] Letter from Frank L. Buell, Seattle First National Bank, Seattle, Washington, July 29, 1954.

[7] Claude Henson, "A Bank's Agricultural Program Expands Community Resources," *Banker's Monthly*, May, 1952, 4.

and made them available at a very nominal fee to local farmers (Fig. 1). By 1952 dairy income in Buncombe County exceeded $2,000,000, an increase of approximately 50 per cent over 1947.

Still another example of banks directly affecting the character of land use in an area is found in north central Wisconsin. There, in 1951, 48 banks in Wood, Marathon, Taylor, Oneida, Vilas, Forest and Clark Counties—counties largely dependent on a sustained

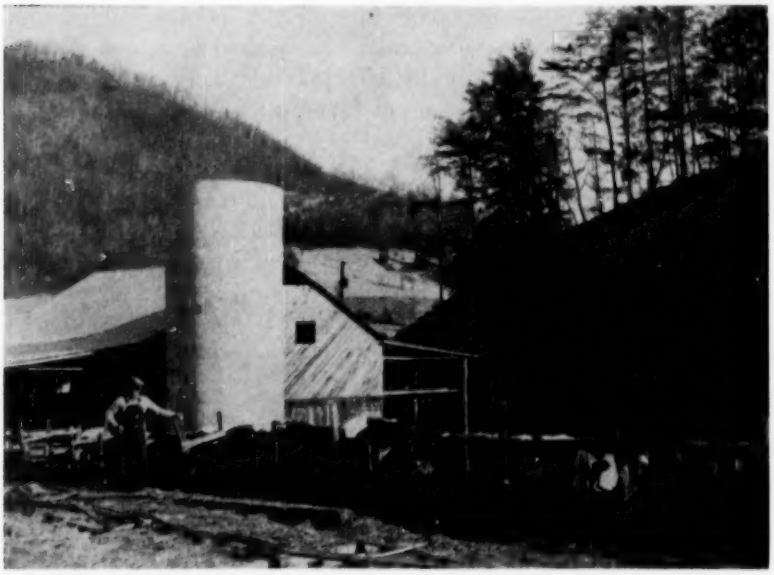

FIG. 1. Type of silos constructed by farmers around Asheville, North Carolina, with forms provided by The Bank of Asheville. Courtesy Bank of Asheville.

flow of forest products for their economy—bought five tree-planting machines at an approximate cost of $1,000 each.[8] Landowners work out details for use of the tree-planting machines with one of the recognized forest organizations. Then, arrangements are made to rent a machine at a very low cost. 830,000 trees were planted in 1952 and nearly 2,500,000 trees were planted in 1953.[9]

In addition to these direct influences on the geography of their

[8] "News for County Bankers," *Banking*, November, 1952, 64.

[9] *Ibid.* The charge in 1951 was $2.50 per hour which included the cost of an operator.

service areas, rural banks indirectly influence the character of many regions by their support of conservation programs, 4-H groups, adult-educational programs, operation of experimental farms and selective offerings of credit. Thus, thru the establishment of unique promotional programs rural banks are definitely influencing the character of their service areas. Furthermore, banks differ from place to place in their willingness and in their ability to shape the geography of their service areas by offering varying degrees of assistance in farm construction, land rehabilitation, improvement programs, mechanization, educational and promotional programs and finally, by offering relatively easy credit in recognition of sound, progressive farming practices.

Unique Banking Influences on the Geography of Urban Areas

Most forward-looking banks want to increase their deposits and enlarge their operations but differ widely in the measures which they adopt in order to reach these objectives. On one hand, city banks differ from rural banks in the kinds of special services that they must provide in order to attract new industry and to hold old concerns as their customers. On the other hand, from the geographic point of view at least, urban banks differ most from one another in their approach to the money problems of complex urban areas consisting of mixed industrial, commercial and residential districts.

The vital role played by some banks in community development within complex urban areas is exemplified by the way that the Central National Bank of Chicago is helping to rehabilitate the "Near West Side" of that city. The "Near West Side" is a congested area set off from the rest of the city by the Chicago River, the New Congress Street superhighway, a new multi-million dollar medical center and a major system of railroad tracks.[10] It is a melting pot of many peoples. With few exceptions residential buildings are more than 50 years old and half are dilapidated. Of great significance, however, is the fact that new commercial and industrial construction exists side by side with old, dingy, dilapidated factories and warehouses[11] (Fig. 2). The value of new construction in the area precludes complete clearing of whole city blocks.

[10] J. Ross Humphreys, "A Chicago Bank Joins in Community Redevelopment," *Banking*, January, 1951, 56.

[11] *Ibid.*

While only one-third of the people of the area work in local industry, local industry is handicapped because it cannot recruit sufficiently large labor forces. So even tho funds are available for additional industrial development and rehabilitation these cannot be used until housing is created, especially for managerial families. Adding to this problem is the fact that in Chicago, as elsewhere, investment funds are available for the type of redevelopment that has become so widely accepted as practical in metropolitan cities—namely, the mass eviction of present occupants and complete clearance of buildings from a large tract of land, followed by mass construction of new commercial and residential districts—but, the problem of mass eviction in such a complex dis-

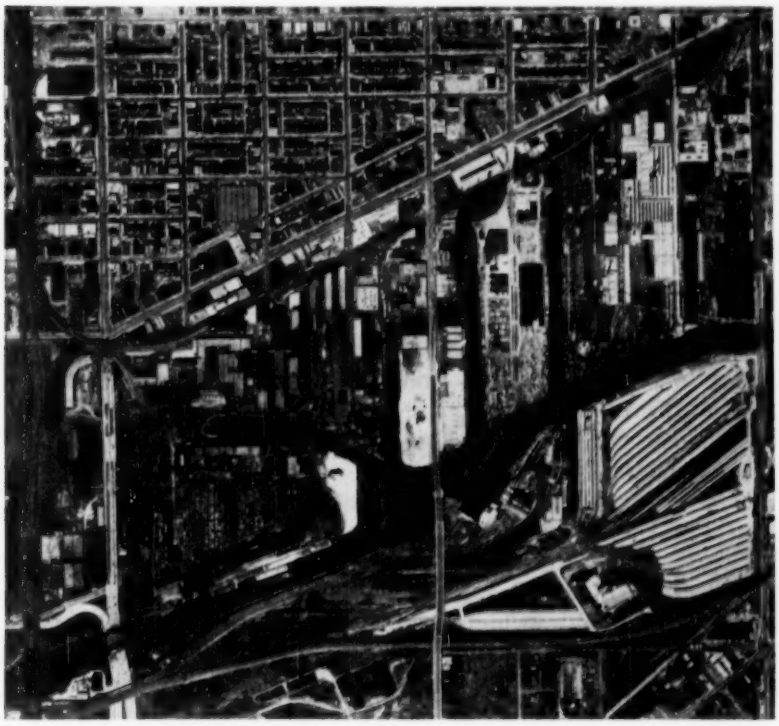

FIG. 2. Vertical view of a border section of Chicago's "Near West Side" showing the great range in ages and the many different kinds of buildings in that part of the city. Courtesy Chicago Aerial Survey Co.

trict makes these funds unusable.[12] Besides, mass clearing and construction cannot solve the needs of the area. A survey by the Near West Side Planning Board indicated that a combination of all housing types was necessary. This, of course, is a situation made-to-order for a local bank with a stake in the prosperity of its service area. By their participation on the Planning Board, bank officers were able to see the whole picture and to loan money not otherwise available to rehabilitate certain of the old homes and stores and to finance new construction.

Similarly, in many smaller cities banks are responsible for modernization and improvement of individual stores and shopping centers and for the creation of new industries. For example, the Hardwick Trust Company of Hardwick, Vermont, has adopted a policy of approving store modernization loans based on the principle that even in cases where it is not the best banking practice it is a good practice to promote the appearance of the community.[13] In still another instance, the National Bank of Cedartown, Georgia, pushed to completion a feed mill, the first in the community, in order to provide a local market for grain and a local source of feed.[14] Also, small city banks influence their communities by sponsoring festivals, camps and institutes in order to draw tourists' trade into their service areas.

Returning to the larger city banks, certain of them offer highly specialized services not generally available. Only ten cities in the entire United States offered Accounts Reconciliation Plans as of March, 1954. Altho it is a new service, and growing, it calls for expensive machines and highly skilled technicians so that in general its development will probably be limited to larger banks. This special service completes statement verifications at no additional charge. It can be applied to such needs as payrolls, insurance payments and dividends. Present savings to customers availing themselves of this service exceed 20 dollars per 1,000 checks and saves over 90 per cent of the time formerly spent in reconciliating accounts. Thus, proximity to a bank offering this plan has become another "throw factor" in the location of such activities as cor-

[12] *Ibid.*

[13] Gerald M. Ladd, "Community Service—Big Job of the Small Town Banker," *Burroughs Clearing House*, July, 1953, 34.

[14] John A. Sibley, "Philanthropy—A Matter of Self Preservation," *Trusts and Estates, January*, 1953, 9.

poration dividend and corporation payroll offices and in establishing the home offices of medium-sized insurance companies.

Another service offered by many large city banks that differs from place to place is found in their industrial departments. Some of these are extremely active and consist of highly trained specialists and research personnel. Outstanding among such banks is the South Texas National Bank of Houston. Their industrial department is staffed with petroleum engineers, chemists and industrial location technicians. In addition to providing guidance for industries either already in the area, or planning to move into the area, their department publishes directories of local producers, and other industrial data for the Houston area that are of world-wide interest. These publications are sent to present and potential users thruout much of the world. Just how much business they actually attract is probably impossible to determine, but there is no question but that they have a positive influence.

Not only do individual banks cooperate in urban planning in isolated cases as the above examples have indicated, but in states where branch banking is legal the established policies of one bank may be reflected in the development of Urban Centers thruout the state. For example, the 42 branch office managers of the National Bank of Commerce of Seattle are to cooperate with the University of Washington's Department of Community Development as they move from city to city in a statewide program to assist Washington cities in planning for future expansion. These branch managers are expected to work on planning committees and the facilities of each branch are to be made available for computation of statistical material.[15] Thus, the influence of one large bank's policies can have far-reaching results.

Knowledge of Geography Requisite for Successful Banking

It has already been pointed out that bankers must be cognizant of local geographic factors—factors that determine the economic tenor of their service areas. In certain situations a thoro knowledge of the geography of an entire state is requisite to the most successful bank operations possible. For example, The First National Bank of Portland, Oregon, located its branch offices keeping in

[15] Letter from Noel Johnson, The National Bank of Commerce of Seattle, Washington, August 2, 1954.

mind that in summer millions of dollars in resources flow into their Eastern Oregon branches resulting from the deposit of proceeds from the annual wheat harvest. As those deposits mount, it enables their western offices to loan greater sums to the valley and coastal logging firms so that that key Oregon industry can stockpile timber for use thruout the winter when the weather limits logging operations.[16]

Further evidence that banks need to know the geography of their service areas is shown by the special films prepared by the National Bank of Commerce of Seattle, Washington. Selected topics from this list are:[17]

1. The Yakima Valley
2. Wenatchee Valley
3. Port of World Trade
4. Waterville Wheat Farm
5. 4-H Dairy Farm
6. Apple Harvest
7. Rebuilding a Town
8. Our Undefended Border
9. Who Owns the Tidelands
10. Richland, the Atomic City
11. City of Longview
12. Grand Coulee Dam
13. Quincy
14. Power for the Northwest

In fact, the intimate geographic knowledge of their service areas that is required by bankers, especially in bank promotional work, suggests that here is a career field for properly qualified geographers. Recommended fields of study for individuals expecting to enter such a vocation are: 1. Economic Geography (including work in industrial location, marketing and transportation geography); 2. Urban Geography; 3. Conservation; 4. English Composition; 5. Public Speaking; 6. Accounting; 7. Business and Economics (including Banking); 8. Business Law; and 9. Statistics.

Naturally, this program does not include the training of bank agricultural advisers or many kinds of industrial engineers. Such personnel must necessarily obtain their main specialties thru their particular disciplines but geographers approach the needs of the banker most closely because of their experience in the study of regions.

Conclusion

That the college or university introductory economic geography course would be greatly enriched if it were to contain a unit deal-

[16] Letter from Floyd Bennett, The First National Bank of Portland, Oregon, July 19, 1954.

[17] Brochure entitled "On the Human Side" published by the National Bank of Commerce of Seattle, Washington.

ing, at least in a general way, with the different banking services that vary from place to place and their influence on specific regions is the main conclusion of this study. For, as has been pointed out, the accumulation of capital rightly, or wrongly, used can be a powerful force in the shaping of a region's character. Also, an understanding of banking factors forms part of the basic background material requisite either to a development of the best conservation measures possible in a rural area or in the formulation of a progressive urban plan.

That there is an interdependence between the fields of geography and of banking is another conclusion of this study. On the one hand, banking geography offers promising and interesting areas for geographic research; and, on the other hand, because a bank's optimum development is contingent upon the exploitation of the geographic factors present in its service area, banking offers profitable careers for properly trained geographers.

In other words, the old adage that "money speaks" applies to geography as well as other fields. The ways in which bankers use and "make their accumulated deposits talk" are the keys to answers of many geographic problems and, in turn, geographic knowledge can aid bankers in making the best possible use of accumulated deposits.

GEOGRAPHY IN THE ELEMENTARY AND SECONDARY CURRICULA*

In response to numerous requests relative to the position of geography in the curricula of the elementary and secondary schools, the National Council of Geography Teachers presents the following statement, as a possible aid in curriculum construction.

Place and time are basal factors in all human relations. "The earth is the stable stage on which the accelerated drama of humanity is being played. The study of geography beyond the elementary school, to the very end of school and college days, holds out one of

* This short manuscript first appeared in the April, 1937 issue of the JOURNAL OF GEOGRAPHY on pages 154-157. We believe it worthy of being reprinted in this issue. One might raise the question, "Will we accomplish more during the 1950's than we did during the 1930's?" A bibliography of 22 Selected References was published with the original manuscript on pages 157-158.

the brightest hopes of a saner staging of this drama that vitally concerns us all.''[1] Knowledge of the natural setting in which man and nations function and of the part which natural factors play in the interpretation of human affairs are critical elements in the solution of many social problems. Numerous human disasters, such as the destruction of millions of acres of farm land, and the efforts of man to carry humid-type agriculture into arid lands, could have been avoided had our people been informed in the modern type of geography.

We are confronted constantly by international strife. Commonly strife is based upon the need or desire to acquire and control natural resources such as minerals, harbors, rivers, agricultural lands, trade routes, etc. Frequently more pleasant sounding reasons are offered for public consideration. Another basis for international ill-will is ignorance of the every-day problems of living which people face in lands other than one's own. The more one knows of the means of support for people in other lands, the farther he sees into the attitudes and policies in those lands, the less ''strange'' or ''unreasonable'' people in those lands seem. ''The science of elementary geography contributes without fail, and in a large measure, to those understandings, and attitudes that are the bases of just, harmonious relations between peoples of different countries and of different sections within a country.''[2] It is of vital importance that our citizens should possess the knowledge that would enable them to more correctly interpret international relations and human motives.

Geography, like other fields of knowledge, has a contribution to make that is distinctive and which is essential to an understanding of, and to the solution of many human-welfare problems. This potenial contribution has been largely disregarded in the American system of education. In this respect many European schools are superior to ours.

Among these contributions may be mentioned the following:

1. Geography in education deals primarily with interrelations between man and his natural or earth environment. Efforts on the part of man to make adjustments to his natural surroundings are

[1] International Understanding Through the Public School Curriculum. Public School Publishing Co., Bloomington, Illinois, 1937. p. 125.

[2] *Ibid.*, p. 133.

universal and involve some of the major problems of man. No other field of knowledge deals systematically with these interrelations.

2. It contributes a knowledge of the specific uses man makes or may make of natural resources and, in so doing, it contributes to a knowledge of climate, soil, surface, coal, iron, oil, forests, harbors, rivers and other natural features and conditions. Man's effort to utilize natural assets to the best advantage and to cope with natural handicaps, affects his daily life and thinking. No other subject supplies this body of knowledge of interrelationships between man and nature which are so essentional to an understanding of human affairs.

3. It contributes to a realization of the interdependence of nations and of regions within a country; it shows how the people in any region or nation depend on people of other regions or nations in their efforts to develop their natural resources, and to exchange resources or finished products. Too often the activities of man are "taught" without an understanding of the natural conditions upon which those activities are based. This commonly leads to a continuous compounding of erroneous thinking.

4. It contributes a knowledge of place, and its associations, as a coordinate of time—both basal factors in the interpretation of human endeavors.

5. It contributes a knowledge of the natural setting that is helpful in understanding many significant facts presented in social studies such as history, economics and sociology, etc.

6. It contributes directly to an understanding and appreciation of the efforts of man to live better in the natural setting of the region in which he resides. Lack of such appreciation helps to explain many of the strained relations and bitter struggles between human groups that have occurred in the past or exist today. Such a sympathetic understanding is essential to peaceful relations.

7. It contributes an appreciation of the fact that in explaining the evolution of human society, whether sectional, national or international, the natural setting in which that evolution took place is one important factor. "There can be no real understanding, appreciation, or effective solution of world problems without recognition of the significance of earth environment in the evolution of human history."

8. It contributes to an "understanding of common human inter-

ests in the production of raw materials, their manufacture and marketing; to an understanding of the significance of natural resources in the well-being of people and why those resources are a subject of international discussion."

9. It leads "to a realization that the highest individual success, prosperity and happiness are dependent upon the existence of similar conditions among other individuals, whether this be within a given local group, within a country as a whole or between countries; in other words, a recognition of the rights of others and the substitution of cooperation for aggression."

Such fundamental knowledge, ability to interpret and appreciation of man's relation to his earth environment, as are here outlined, are essential to a broad view of human relations thruout the world, and contribute directly to the solution of many groups, national and international problems.

Some schools may find it convenient to develop geographic instruction in accord with one formula and some by another. We hold that excellent work may be done by following any one of various procedures. However, we urge the retention of the distinctive contributions that geography may make, or that it may make more effectively than can any other subject, in any curriculum revision that may be undertaken. We also urge that sufficient time be assigned to any unit so as to develop ability to use geographical materials accurately and to think correctly in terms of information they supply. This requires more than mere superficial information. We also urge that a competent geographer be invited to participate in the preparation of any geographical curriculum.

To make such geographical work effective, adequately qualified teachers are essential. The qualifying standards should, at least, equal the educational requirements in any other field of knowledge. This necessitates thoro preparation of teachers in geography in the teacher training institutions. Curriculum makers should recommend that such training be provided. In some states geographical training of teachers is now far advanced and in those states excellent geography teaching is being done. In other states the geographical work in teacher training colleges is woefully inadequate. Such "below standard" colleges must improve their geographical offerings and their geography teaching staff, before the geographical work of the school system will function effectively. High grade

geographical work should not be expected when the subject is taught by teachers who have had no training.

Committee

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State Teachers College
Mankato, Minnesota

Approved by the Board of Directors of the National Council of Geography Teachers at its meeting at Syracuse, N.Y., Dec. 30, 1936.

ALISON E. AITCHISON
President

AN ELECTRIC MAP TEACHING DEVICE*

GEORGIA PESEK
Teacher District 30, Valley County, Nebraska

A school-made electric map of the United States has proven successful in my geography class. The map I constructed and will describe is designed to teach the location of our states and their capitals. Various themes may be used in the construction of this type of teaching aid.

Obtain the following materials before starting construction: 36 × 36-inch piece of wallboard, 98 paper fasteners, one 1.5-volt dry cell battery, one light bulb and socket from flashlight and 50 feet insulated wire (telephone).

CONSTRUCTION

A large outline map of the United States is placed on a 36 × 36-inch piece of wallboard. Then the state boundaries are added and the individual states colored. The location of each capital, both state and national, is designated by the head of a one-inch paper

* A description of this teaching aid first appeared under the title of "How to Construct an Electric Map" in the January, 1954 issue of the Bulletin of the Nebraska Chapter of The National Council of Geography Teachers.

fastener driven thru the board. In the legend below the map outline space 49 places for the names of the capitals and put a paper fastener in front of each name. The cities should not be listed in any special order lest the pupils recognize the arrangement (as capitals of states along the Atlantic, Pacific or Gulf of Mexico coasts).

The wiring is simple and is done on the back of the board. (Some of the older pupils can help with this as with other parts of the construction.) The tips of the fasteners locating a capital in the state and its name in the legend are connected with an insulating wire. For example, the tips of the fasteners showing Lincoln in Nebraska and the name Lincoln in the legend were joined. Be careful to remove only sufficient insulation from the ends of the pieces of wires to make adequate contact with the fastener tips. After the 49 connections are made, take the socket from an old flashlight, wedge it thru the board in a prominent place and insert a bulb. To the bulb socket protruding from the front of the board, solder a piece of insulated wire long enough to reach the fastener heads beside the capital names in the legend. To the part of the socket sticking thru the back of the board, solder a piece of wire and connect it to one of the posts of a 1.5 volt dry cell battery. Another piece of wire long enough to connect the battery and the fastener heads in the legend is fastened to the other battery post.

Use

The map is now ready for operation. A pupil grasps the long wire (a few inches from the bare end) fastened to the battery in one hand and the wire fastened to the socket on the front of the map in the other hand. He touches a fastener head in a state representing the capital of that state with the end of one wire and the fastener head in front of the correct city in the legend with the other wire. If he is correct in his second selection a complete circuit is formed and the bulb lights up. If the fastener head in front of the wrong city is touched, the bulb remains dark.

Children are fascinated with this teaching aid. They are eager to master the correct response combinations which are symbolized by the lighted bulb. They spend many minutes in repetition and recall in a happy learning situation.

Electric maps showing other physical and cultural elements of geography may be constructed, such as the location of minerals and manufactured products.

THE NATIONAL COUNCIL AT WORK

The task of appointing members to new committees and of appointing members to various continuing committees is about completed. Chairmen of committees welcome communications from members of the National Council. It is to your interest and that of the growth of our organization to participate in whatever way you find possible to carry forward the work of the Council. Do send your comments and suggestions and questions to the officers or to the chairmen of committees.

To bring NCGT to the teaching profession at all levels and to help those seeking answers to questions and problems, the National Council of Geography Teachers has five people each in charge of a special phase of this important aspect of public relations.

Director of Publicity: Mary Viola Phillips, Second Vice-President, head of geography at Senior High School, New Kensington, Pennsylvania.

Director of State Coordinators: Mamie L. Anderzhon, William Beye School, Oak Park, Illinois.

Chairman of Inquiries: Fred K. Branom, Chicago Teachers College, 6800 Stewart Avenue, Chicago 21, Illinois.

Editor of the JOURNAL OF GEOGRAPHY: Thomas F. Barton, Indiana University at Bloomington.

Secretary of the NCGT: Ina Cullom Robertson, State Teachers College, Valley City, North Dakota.

There are two committees appointed annually that select the articles of special merit in the JOURNAL.

Committee on J. Paul Goode Prize and the George J. Miller Prize for the best article appearing in the JOURNAL OF GEOGRAPHY for the preceding five-year period on a phase of geography best representative of the interests and contributions of the person for whom the award is named. The 1955 Committee includes: Cora Sletten, Chairman, 512 South Second Street, Mankato, Minnesota; and Earl B. Shaw, Mary Viola Phillips and Norman Carols.

A continuing committee considers the contributions of outstanding geographers for distinguished and outstanding service and leadership. The Committee on the Distinguished Service Award: Earl B. Shaw, Chairman, State Teachers College, Worcester 10, Massachusetts; and Mamie L. Anderzhon, Katheryne T. Whittemore, Howard Martin and Alfred H. Meyer. Two ex-officio members are the President and Secretary.

Nine active committees are at work preparing materials for publication or reports or recommendations.

Committee of Geography in Elementary Education: G. David Koch, Chairman, Indiana State Teachers College, Terre Haute; and Thomas F. Barton, Harriet Long, Neva McDevitt, Peter Sardo, Virginia Schauer, Marion Seibel, Grace Starlin and Edith C. Walker.

Committee on Map Bibliography. Margaret Chew, Chairman, Wisconsin State College, La Crosse; and George Corfield and Carl Mapes.

Committee on Promotion of International Understanding: Norman Carls, Chairman, University of Pittsburgh, Pennsylvania; and Clyde Kohn, Zoe Thralls, and Henry J. Warman.

Committee on Publications: J. Edwin Becht, Indiana University, Bloomington; and Harriet Long and John W. Reith.

Committee on Preparation of Reading Materials: Helen Mixter, Chairman, 2418 St. Paul Street, Baltimore 18, Maryland; and Emily Baker, Adelaide Blouch, Mary Louise Fagg, Eleanor Gover, Ida Lautz, Harriet Lee, Anna Moengen and Zita Mueller.

Committee on Research in Geographic Education: H. Herbert Gross, Chairman,

Concordia College, River Forest, Illinois; and Carol Brumby, Adah Flemington, Paul Griffin and Eleanor Weigand.

Committee on Resource-Use Education: Sigismund deR Diettrich, Chairman, University of Florida, Gainesville; and J. Sullivan Gibson, Nicholas Helburn, Melvin Kazack, Ella O. Keene, Rueben L. Parsons, George T. Renner III, Francis J. Schadegg and Ruth Sugarman (additional members yet to be appointed).

Committee on Tests: Florence Cullin, Chairman, North Texas State College, Denton; and Berenice Casper, Douglas Hammond, Cordelia Harbeson, Frank E. Sorenson, Ruth H. Stanley and Adelle Zigrang.

Committee on Television: Mildred Danklefsen, Western Reserve University, Cleveland, Ohio; and Jewell Phelps, John H. Walker and Alfred R. Summer.

A continuing committee in charge of granting funds for research and for passing on the merits of applications for such funds is under the chairmanship of Katheryne T. Whittemore, State University College for Teachers, Buffalo, New York; and Anne Goebel, Loyal Durand, Jr., Nels Bengtson, and John H. Garland.

The full membership of some committees is still incomplete. These are: Committee on Nominations, Committee on Planning, Committee on Resolutions, and the Committee on National Council and Geographic Education Standards.

It is with pleasure I can announce at this time that the speaker at the annual banquet at the November meeting in Indianapolis will be Dr. Neville Scarfe, Dean of Faculty of Education, University of Manitoba, Winnipeg, Canada.

M. Melvina Svec
President

GEOGRAPHICAL PUBLICATIONS

Calvin F. Schmid. **Handbook of Graphic Presentation.** The Ronald Press Company, New York, 1954. vii and 316 pages with diagrams and index. $6.00.

Geographers have produced a number of books on cartography and graphics which have been useful to sociologists; in this *Handbook* Sociologist Schmid presents material which should be of interest to geographers.

Schmid's coverage of the field of graphics is extensive; the pace is rapid as he moves from one method of presentation to another. He places the emphasis on the uses, suitability, construction and advantages and disadvantages of different graphic forms. There is little discussion of theory, but frequent references to sources of more specific information correct this lack. In keeping with the topic, great reliance is placed on the many well-executed illustrations.

Following a short introduction and a chapter on tools and techniques, the various types of charts are discussed according to their form: rectilinear coordinate, bar and column, semilogarithmic or ratio, frequently graphs and a miscellaneous group. A relatively long chapter on statistical maps follows, in which the emphasis is placed on the symbolization of spatial distributions. Included is a section on maps with graphic forms, such as bar graphs, superimposed. Chapters on pictorial and three-dimensional (projected) charts follow, with occasional application of these methods to maps. A short summary of reproduction methods concludes the book.

Because of the limited space devoted to maps and the concentration on charts, Schmid has been able to present a wealth of material which is inadequately covered in most standard works on cartography. For the geographer, the book's function is complimentary to these standard works. It should be of reference value to all those interested in cartography and of supplementary value to the current texts used in cartography courses.

Gerard J. Foster

University of California, Los Angeles.

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GEOGRAPHICAL PUBLICATIONS

Vinson, Brown. **How to Make a Home Nature Museum.** Little, Brown, and Company, Boston, 1954. 214 pages, $2.50.

If you want to show the world and its life so that others may profit, then you want to make a museum. A group of collections isn't enough; you want to use your collections plus your brain and aesthetic sense to make something as well done as that in a natural history museum. You won't need a whole room nor a rich man's pocketbook.

This book tells you how to plan the space you have available for a museum. There are illustrative examples of display cases, good mountings, and even ways to build backgrounds in your museum cases with clay, papier-mâché, sand or wax.

Some teachers and camp counselors often have specimens but don't know how to prepare and save them. Our author shows the need for accurate note taking and he dynamically illustrates how to arrange your museum displays for both beauty and storytelling. If one wonders what captions shall catch the eye and make the museum really live, this book can help you.

Your museum can be filled with things that are constantly changing. It need not be stagnant. Your museum can contain things that a person can handle, feel, touch, squeeze, lift, examine, smell, see and manipulate. If handled properly, it will encourage all to explore the world around them.

The appendices at the back seem to be a great asset too. One appendix is a very excellent bibliography on things we might need to know to start and maintain our museum. There are books on parasites, birds, reptiles, insects, etc. Another appendix will tell you where to get supplies for your museum. Addresses of biological and nature supply houses are given.

Anyway I look at it, this book is a "must" for science teachers, camp counselors and for people that just naturally have a yen for putting their findings in an attractive display.

Anne A. Agnew

Avonworth Schools
Einsworth, Pittsburgh #2, Pennsylvania

Maneck B. Pithawalla. **An Introduction to Kashmir.** Oxford University Press, Karachi, Pakistan, 1953. xiii and 128 pages, 13 maps, 12 photographs, bibliography. $3.00.

Professor Pithawalla has made an important addition to the field of geography in that he has organized, analyzed and presented in a readable form much material covering an area which has previously been somewhat ignored by geographers.

The book is divided into two sections; Part I occupies 53 pages and briefly discusses the Geology and Physical Geography under 10 chapter headings. The most valuable sections to the geographer are those dealing with Physiography, Plant and Animal Life and Climate. Part II covers 64 pages and has 12 chapters, covering Human and Economic Geography. Several sections of Part II, notably the chapter "A Cross Section of Human Settlements," appear extremely superficial. In this chapter less than one page is devoted to the discussion of Srinagar, "the only city worth the name in Kashmir," and there is no discussion of its locational advantages, of its function or even its relationship to the hinterland. Following the page on Srinagar, 15 cities are discussed with only about 60 words being devoted to each.

Despite shortcomings of the text and rather poor printing of the maps, this volume is a valuable "Introduction to Kashmir."

Robert E. Huke

Dartmouth College

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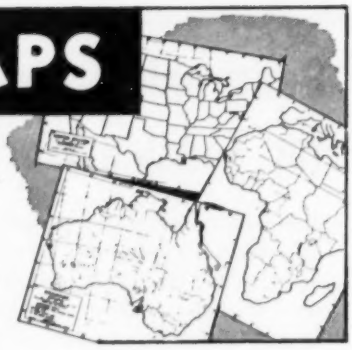

GEOGRAPHICAL PUBLICATIONS

Lew Dietz. **Jeff White, Forest Fire Fighter.** Little, Brown and Company, Inc., Boston, 1954. 210 pages. $2.75.

The author presents a most realistic picture of the work done by the Forest Service. This story which describes several conservation practices is made interesting by the mystery connected with the man wearing the green hat.

Jeff White, an expert woodsman, went into the New England forest to prepare a camp for the hunting season. He found the woods extremely dry and was informed by the district warden that unless there was rain the area would be closed to hunters. While waiting for rain, Jeff took part in two unusual experiences: one a pleasant venture, helping the air warden make a beaver survey; the other a dangerous occurrence, helping fight a roaring forest fire.

The writer furnishes information concerning the efforts made by the Forest Service Organization to protect forests and wild life from destruction. Wardens, whether they serve on the ground or in the airplane, must be trained for both routine and emergency tasks. The author points out the importance of having an experienced force at the scene of a fire. Maps which show the location of storehouses, communication lines and sources of water aid in organizing the crew and equipment. Food and medical supplies are essential for fire fighters. The three classifications of forest fires are clearly defined by the author.

Jeff White, Forest Fire Fighter is a story hard to put down until finished. The search for the man killer, Peter Lauck's secret living quarters when panning for gold, solving the cryptogram, the green hat in the rock shelter and Sid who entered the forest as a stowaway make an exciting story, for students, especially boys, at the high school level.

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Centennial Junior High School
Decatur, Illinois

EDITORIAL NOTES AND NEWS

Dr. Henry Warman, School of Geography, Clark University, will offer a "Workshop in Geography" at the University of Southern California, Los Angeles, during August, 1955.

Have you examined a copy of *The Columbus Atlas* by John Bartholomew and published by the McGraw-Hill Book Company, Inc.? A text edition has also been published.

EDITORIAL NOTES AND NEWS

Professor George J. Miller, for 30 years editor of the JOURNAL OF GEOGRAPHY, is well and active. Professor and Mrs. Miller live at 1800 Maxwell Lane, Bloomington, Indiana. In addition to other contributions and services he made the illustrations appearing in the 1954 Editorial Notes and News.

Have you examined *Geography of North America* by Miller, Parkins and Hudgins? The book contains four parts: Part I, North America—The Continent; Part II, The United States and Alaska; Part III, Canada and Part IV, Mexico and Middle America. You can obtain an "on-approval copy" from John Wiley & Sons, Inc., 440 Fourth Avenue, New York 16, N.Y.

According to the *Science News Letter* "critical depletion of coal resources makes it necessary for Britain to be able to produce from atomic energy the electric power equivalent to 20,000,000 tons of coal a year in 1970."

Are you familiar with the booklet, *Baited Bulletin Boards, a Handbook for Teachers*, prepared and copyrighted by Arthur Koskey in 1954? The publisher is the Globe Printing Company, 1445 South First Street, San Jose, California.

Will readers of the advertising section in this issue also please refer to the advertising in the March issue as both issues carry advertisement about universities and their geography offerings.

Hi-School Geographer is the official mimeographed bulletin of the Manuel Geography Club of the Manuel High School, Peoria, Illinois. A quick survey of this attractive bulletin indicates that members are very active both in their school and in the field.

The Three Dimension Company of Bell and Howell, have announced the new TDC Schoolmate multiple-purpose slide and filmstrip projector. Information about this new projector may be secured by writing to 3512 N. Kostner Avenue, Chicago 41, Illinois.

IMPORTANT GEOGRAPHY TEXTS

The Geography of Europe, 2nd Ed.

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Organized around the climatic divisions of Europe rather than by political units, this standard text has been brought up to date by new chapters on the changes World War II brought about in Europe and on the geography of the Mediterranean Sea. Changes in sovereignty have necessitated a considerable amount of rewriting and reorganization in other parts of the book, as in the sections dealing with Germany, Poland, and the Soviet Union. More than 170 halftone illustrations are included. **870 pages, $6.75.**

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